

The U.S. Ag Trade Balance... More Than Just a Number

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A decade ago, a scenario in which the value of U.S. agricultural imports would someday exceed that of U.S. exports seemed farfetched. Indeed, the United States has been a net exporter of agricultural products since 1959, an uninterrupted span of 44 years. Today, the improbable has become probable. Since 1996, the agricultural trade surplus has shrunk from \$27.3 billion (an all-time high) to \$10.5 billion. Although U.S. agricultural exports continue to rise, imports are increasing nearly twice as fast.

The rapid growth of U.S. agricultural imports relative to exports in recent years may come as a surprise to many because the U.S. is still the world's leading exporter of

farm products. In fact, U.S. agricultural exports grew by almost \$3 billion in 2003. And, higher commodity prices point to export gains in 2004. But the U.S. is also the world's largest agricultural importer. Over the last 7 years, U.S. agricultural imports have increased by more than \$13 billion, from \$32 billion in 1996 to \$46 billion in 2003. Agricultural economists Philip Paarlberg and Phil Abbott, both at Purdue University, predict that, if these trends continue, the current agricultural trade surplus will turn into a deficit toward the end of the decade. This forecast is consistent with ERS analysis of U.S. import and export trends.

This projected reversal of the trade balance raises questions not only about why a trade deficit may be imminent, but also about whether a trade deficit signals waning competitiveness. The trade balance, however, is primarily an accounting measure that, by itself, does not provide information about the scale or composition of a country's international exchange of goods, nor the benefits derived from those goods. A closer examination of the composition of U.S. agricultural trade, economic growth, demographic shifts, changes in consumer preferences, and other factors indicates that there's more to the looming trade deficit than a simple negative sign.

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Exports Fall in the Late 1990s Amid Global Economic Events

Only 20 years ago, about half of U.S. exports consisted of major bulk commodities—grains, oilseeds, cotton, and tobacco. The shares of livestock and horticulture products in total agricultural exports were 10 percent and 9 percent. Today, the export share of bulk commodities has fallen to 36 percent, while livestock products rose to 16 percent and horticulture products increased to 21 percent.

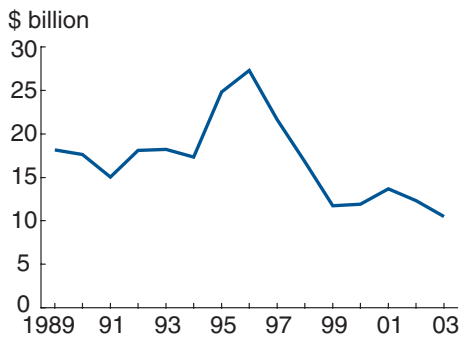
At the same time that the composition of U.S. agricultural exports was changing, economic developments across the globe

led to a decline of U.S. agricultural exports and boosted U.S. agricultural imports. First, the financial crisis in Asia, starting in 1997, gave rise to debt burdens and economic recessions, stifling demand for U.S. agricultural products in many major Asian markets—Korea, Taiwan, Hong Kong, Thailand, and Indonesia. As the crisis spread to Russia, then to South America, U.S. agricultural exports fell further.

Meanwhile, the U.S. economy was booming, causing the U.S. dollar to appreciate and effectively driving up prices of U.S. agricultural exports. Demand for U.S. products fell and the value of agricultural

exports dropped by more than \$10 billion from 1996 to 1999. The value of bulk shipments of food and feed grains, cotton, and tobacco fell by an average of 10 percent annually during this period, but has rebounded in recent years. Among grains, exports of wheat, rice, corn, barley, and sorghum dropped the most. The total value of bulk shipments fell \$6 billion from 1996 to 2000, with grain exports alone decreasing by \$3.4 billion. As volume shipments of most grains fell, lower world farm commodity prices exacerbated the drop in export values.

Farm trade surplus declines as imports rise twice as fast as exports



Source: U.S. Census Bureau.

U.S. agricultural exports would have been even smaller had processed food exports not expanded by 5 and 6 percent in 2000 and 2001. Still, overall U.S. exports of processed foods have been generally flat over the past decade. Demand for these products has been weakened by slower growing, mature markets, such as Japan and Europe. Also, high U.S. labor costs limit U.S. exports of processed products, which can often be supplied to foreign markets at lower cost when manufactured by foreign affiliates of U.S. firms. Nevertheless, U.S. processed food exports have roughly kept pace with processed food imports, excluding fish and shellfish.

Despite growing imports, the U.S. has remained a net agricultural exporter because of a natural comparative advantage in producing such crops as grains and oilseeds. Because of a cost advantage due to favorable land resources and capital-to-labor ratios, the U.S. is comparatively better at producing these crops than other countries. The adoption of biotechnology and consolidation of farm operations have further boosted productivity in these capital-intensive sectors. Stagnant import demand in major markets, however, has resulted in a shift in U.S. exports of grains and oilseeds. Over the last decade, the share of U.S. bulk commodity exports shipped to developed countries dropped from 43 to 34 percent. Fast-growing devel-

oping countries are the prospective future markets for U.S. bulk crops and other farm exports. China, for example, is now the largest importer of U.S. soybeans, having surpassed the European Union (EU).

Imports Rise as U.S. Economy Prospers

The strong dollar in the late 1990s dampened U.S. exports, but enabled Americans to purchase more foreign farm products. From 1996 to 1999, as U.S. agricultural exports fell in value, imports rose steadily. As disposable incomes and wealth from investment assets reached unprecedented levels in the late 1990s, U.S. consumers responded by opening their wallets for higher value products, including imported foods and beverages. Imports of horticulture crops and products—vegetables, fruits, fruit juices, nuts, wine, beer, and cut flowers—were in highest demand. From 1994 to 2003, 53 percent of the rise in U.S. agricultural imports was attributed to horticulture products. Purchases of fresh and processed vegetables increased from \$2.7 billion to \$6.2 billion between 1994 and 2003. The value of imported wine jumped from \$1 billion in

1994 to \$3.2 billion in 2003. Animal products—red meat and dairy products—and grain and sugar products rounded out the rest of the gains in agricultural imports.

American consumers, buoyed with larger spending budgets, also purchased more imported processed foods. Of total U.S. agricultural imports of \$46 billion in 2003, processed food and feed products and beverages accounted for \$28 billion, or 62 percent. Excluding fish, seafood, and distilled liquors, U.S. processed food imports exceeded corresponding exports (by more than \$2 billion) in fiscal 2003, the first time since 1989. Cheese, canned and preserved fruits and vegetables, bakery products, pasta, candy, vegetable oils (except soybean), wine, beer, coffee, and cocoa are among the imported processed foods making the largest net gains. Processed food imports increased by an average 7 percent per year from 1994 to 2003, for a total of 96 percent over the decade. This increase does not reflect the larger share of processed foods manufactured by foreign firms with U.S.-based affiliates, such as Nestle.



Grain shipped to former Soviet Union from the U.S.

Ken Hammond, USDA

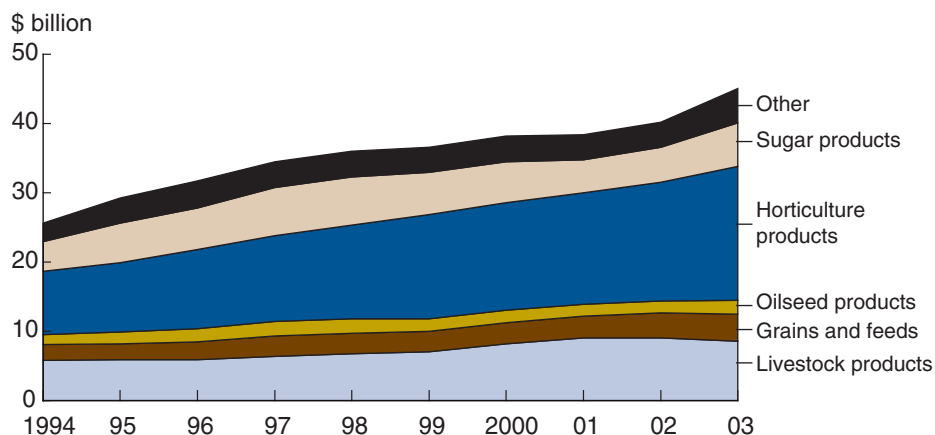
Consumer-Driven Demand Will Continue To Feed Import Growth

A number of key economic and demographic forces—continued U.S. population growth, higher real disposable income, a relatively strong dollar, and comparatively weaker economies in Japan and the EU—suggest that recent trends in import and export growth are likely to continue over the next few years. Changing consumer preferences in food and beverages, driven in part by healthier lifestyles and increasing ethnic diversity, are evident in the products that are increasingly imported today.

Per capita food consumption in the U.S. averaged 2,000 pounds in 2002, of which 36 percent, or more than 700 pounds, were horticulture products. About 43 percent of U.S. agricultural imports in 2003 were horticulture products, which have expanded in value by an average of 8.4 percent annually since 1994. By 2010, close to half of U.S. agricultural imports will be horticulture products, based on long-term trends. When other tropical products such as cocoa, coffee, and sugar are added, horticulture's share of total imports rises even higher.

Increased U.S. per capita consumption (by quantity) of fruits and vegetables, fruit juices, and nuts reflects, in part, the economic forces mentioned above, but also demographic shifts and changing eating

Horticulture products drive U.S. import surge in the past decade



Source: U.S. Census Bureau.

habits in the United States. As the U.S. population ages, the diets of senior citizens—who tend to eat healthful foods—affect the types of foods consumed. In addition to eating more nutritious and high-fiber foods, American consumers are turning increasingly to grain and bakery products, wine, beer, and cheese, reflecting their preference for more processed, prepared, and high-quality products. Increasing numbers of Americans are eating meals outside their homes and ordering more expensive foods. For meals prepared and eaten at home, ready-to-eat foods, easy-to-fix meals, and prepackaged or precooked products are gaining in popularity, particularly among consumers with little time to cook. A growing familiarity with and exposure to ethnic restaurant menus and grocery selections is fueling imports of more exotic and processed products. With domestic suppliers unable to fully satisfy Americans' demands for more diverse food and beverage choices, consumers are increasingly turning to imported goods.

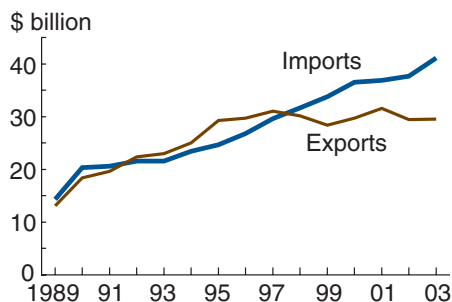
The U.S. is largely self-sufficient in the production of food staples and feed—grains and oilseeds—as well as meat, poultry, dairy, and vegetables. Imports' shares of consumption for these products are all below the import share of total food consumption, 13 percent in 2002 (see box,

"Imports' Share of U.S. Food Consumption Climbs to 13 Percent"). Foods more commonly imported by the U.S. include crops not grown domestically, products that are more cheaply produced overseas, and off-season produce. These imports widen the variety of foods available to U.S. consumers and provide year-round supplies. Imports also help to lower food price inflation with less price volatility. Like other affluent countries, the U.S. demands more premium and convenience (time-saving) foods as consumers' incomes rise. And as the population grows, so, too, does consumption of these imported products.

Developing Countries Are Penetrating U.S. Market

Natural resource endowments in foreign countries, especially developing countries, favor the production of abundant agricultural and food supplies intended for export. For example, despite their large populations, India, China, and Indonesia are producing some crops in excess of domestic consumption and are exporting them. The spread of farm, seed, and food processing technology, a large and underemployed labor force, and favorable climates for high-value crop production are among the advantages that developing countries can exploit in not only

U.S. processed food imports are rising fast while exports are flat



Note: These data include fish and shellfish.

Source: U.S. Census Bureau.

Imports' Share of U.S. Food Consumption Climbs to 13 Percent

Per capita food consumption in the U.S. increased by an average of 10 pounds per year over the past 20 years. At the same time, imported food per capita grew by 5 pounds per year. In 1983, each American consumed about 1,800 pounds of food, of which 160 pounds were imported. By 2002, per capita consumption had risen to 2,000 pounds and per capita imports reached 263 pounds. Thus, not only are Americans eating more imported food each year, but the share of imports in total food consumed is also steadily increasing. Based on the value of total U.S. agricultural imports, each American consumed \$142 of imported food and agriculture products in 2002, more than twice the value of imported food consumed in 1983.

From the early 1980s to 2002, the average share of imports in U.S.-consumed food climbed from 9 percent to 13 percent (based on weight measures). This steady growth is largely attributed to annual increases of imported horticulture crops and products—fruits, fruit juices, nuts, vegetables, wine, and beer. Over the past two decades, as the average American consumed 20 percent more fruits, vegetables, and grain products, imports of these products rose by more than 100 percent (in total weight). Food imports in 2002 exceeded food import levels in 1982 by 39 million pounds. Of that total, more than 22 billion pounds, or 57 percent, were horticulture products. That is, 1.1 billion pounds of the average 2 billion additional pounds of food imported each year over the past 20 years have been horticulture products.

Even though U.S. per capita consumption of red meat fell from an average of 124 pounds per year in the early 1980s to 110 pounds in 2002 (based on boneless, trimmed weight), the import share of red meats consumed, largely beef and veal, rose from 6.6 to 9.3 percent. The import share of dairy foods consumed, mainly cheese, almost doubled from 1.9 to 3.5 percent in the same time span. Fish and shellfish imports as a share of consumption is now close to 80 percent, up from 50 percent in 1982. Together, the import share of animal and seafood products climbed from 3.3 percent in 1982 to 5.2 percent in 2002. The aggregate import share for animal products is low because the import shares of large components—chicken and poultry products and dairy products—are small. Compared with import shares of crops and crop products, shares of animal products are significantly lower.

The aggregate import share of crops and crop products—horticulture foods and beverages, vegetable oils, grains and grain products, sweeteners, candy, and tropical products—was 19 percent in 2002, up from 13 percent in 1983. Except for tropical products (coffee, cocoa, tea, and spices) which have an import share of U.S. consumption close to 100 percent, and fish and shellfish, no food group is imported at a volume more than a third of its domestic consumption weight. Only the collective import share of fruits, fruit juices, and tree nuts comes close at 31 percent, although individual components, such as grapes and grape juice, or apple juice, certainly have much higher shares. Among the major vegetables, broccoli, cucumbers, and tomatoes have the highest import shares of U.S. consumption, and imports of asparagus, chili peppers, potatoes, and squash are also rising fast. Yet despite the smaller import shares of red meat and dairy products, their import values more favorably compare with those of crops and crop products because of higher prices per weight unit of livestock products.

The import share of U.S. food consumption is steadily rising

Food groups	Average percent				Percent	
	1981-85	1986-90	1991-95	1996-2000	2001	2002p
Total food consumption¹	9.0	9.7	10.5	12.0	12.5	13.0
Animal products²	3.4	3.7	3.5	4.1	5.2	5.3
Red meat	6.7	8.1	7.3	7.7	9.3	9.5
Dairy products	1.9	1.8	1.9	2.5	3.4	3.5
Fish and shellfish	50.9	56.0	56.0	64.4	77.8	78.6
Crops and products³	14.0	14.9	16.1	18.2	18.4	19.1
Fruits, juices, and nuts	21.0	26.6	27.3	28.6	30.0	31.0
Vegetables	4.9	6.0	5.5	8.0	8.8	9.6
Vegetable oils	15.5	17.6	17.4	18.0	15.5	15.5
Grains and products	1.7	2.9	5.6	5.9	5.8	5.3
Sweeteners and candy	35.8	25.6	29.4	34.2	28.6	28.0

p = Preliminary or projected.

¹Calculated from units of weight, weight equivalents, or content weight.

²Includes poultry meats and animal fats; egg imports are negligible.

³Includes coffee, cocoa, and tea whose import shares are 100 percent; includes beverages.

Sources: ERS; U.S. Census Bureau.

feeding local populations, but also supplying foreign consumers. The opportunity to earn hard currency through exports is a strong incentive to produce crops and products for foreign markets.

Horticulture crops are among the major exports of developing countries. Forty-two percent of U.S. agricultural imports are horticulture products, of which 43 percent come from Mexico and Latin America. Controlled-climate transport, refrigerated storage, and plant breeding technology in developing countries help maintain the quality and year-round supply of horticulture crops exported to the U.S. Developing countries also supply one-third of U.S. imports of processed foods. Given that 62 percent of total U.S. agricultural imports are processed foods, developing countries will supply an increasing share of processed food in Americans' diets.

U.S. Multinational Companies Play a Role in Trade

About 15 percent of U.S. food imports are supplied by U.S. food companies through their farms, processing plants, and affiliates in foreign countries. For example, the U.S. imports bananas, pineapples, avocados, other tropical fruits, and canned or fresh vegetables produced overseas by Dole, Del Monte, and Chiquita. Foreign growers under contract to U.S. companies also supply agricultural products to the large U.S. market. U.S. food growers and manufacturers, or their affiliated companies, abroad will supply more fresh and processed foods to U.S. consumers, much like other U.S. multinational companies that take advantage of lower costs of land, labor, raw materials, or capital overseas. In Mexico, a number of U.S.-affiliated food growers and manufacturers already export fresh and processed fruits and vegetables to the United States, the result of contract agreements or economic advantages available locally.



The U.S. imports large quantities of tropical crops, like bananas.

Dana Downie, AgStockUSA

Many large U.S. multinational companies prefer to supply foreign markets through sales from their foreign operations or affiliates. The proximity to markets, lower production costs, and avoidance of tariffs and trade barriers provide companies incentives to manufacture products abroad rather than export products from the United States. While the U.S. is a net importer of processed foods from Canada, U.S. companies dominate food manufacturing in Canada, as well as in Mexico. Kraft Foods is the leading food manufacturer in Canada, and PepsiCo is the largest in Mexico. The United States imports more soft drinks than it exports, even though Coca-Cola and PepsiCo are the world's biggest soft drink manufacturers. Circumstances such as these limit the growth of U.S. exports without affecting U.S. imports, in part because U.S. food companies themselves export to the United States from foreign bases.

Trade Brings Americans the Foods They Want

Aside from its symbolic value, the U.S. agricultural trade balance is not by itself a measure of export competitiveness, or import dependence. The U.S. remains a highly competitive exporter of grains, oilseeds, red meats, poultry, and cotton. But the U.S. also imports large quantities of grain products, vegetable

oils, beef, pork, and cattle. U.S. farmers and food manufacturers do not and cannot produce all or enough of the foods that Americans desire, especially tropical crops. Today, trade is simply a means of providing for needs and wants that are not satisfied domestically or are more cheaply produced elsewhere.

U.S. agricultural imports generally differ from U.S. agricultural exports and will continue to increase independently of exports. Imported perishables arrive when domestic supplies are down or are not available, and imports consist mostly of high-value products, while 36 percent of U.S. exports are bulk commodities. The declining U.S. trade surplus does not signal reduced competitiveness of the U.S. farm sector, but rather Americans' preference for a wider variety of foods and beverages. It also reflects the intense competition among foreign food producers and manufacturers to supply the large American market, including American companies and their affiliates.

U.S. population, income growth, and consumer tastes will ultimately push imports even higher in the long run. Fueled by immigration, the population is forecast to increase by 20 million people to 313 million by 2010. As the size and diversity of the population continue to grow, both the quantity and the variety of

food imports will also grow. Disposable incomes of Americans, which are projected to grow by 1 percent in real terms annually, will drive up per capita food spending on higher quality and higher value products. Thus, U.S. agricultural imports in coming years are expected to increase both in quantity and value, as well as in share of total food consumed. U.S. exports over time, on the other hand, depend on economic and demographic growth in the rest of the world. Both imports and exports are dependent on the dollar's exchange value, but with different effects. The higher the purchasing power of the dollar, the faster imports will grow relative to exports, enabling Americans to buy more of the foods they want. **W**

This article is drawn from . . .

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